

PATENT ABSTRACTS OF JAPAN

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(54) MOBILE WIRELESS TERMINAL

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a mobile wireless terminal capable of more efficiently providing data broadcast through a short-distance wireless communication without confusing a user.

SOLUTION: When the wireless terminal receives data on shops from plural short-distance wireless applications, the wireless terminal, referring to the history of use of the shops or history of shop data provision, automatically selects data of a shop which is used frequently or which provides data frequently and provides a user with the data. As a result, data can be provided more efficiently to the user without confusing the user.

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CLAIMS

[Claim(s)]

[Claim 1] the store use hysteresis according [on the walkie-talkie terminal with which receives the information on the store concerned broadcast from the

short-distance walkie-talkie installed in two or more stores, and a user is provided, and] to the user of the walkie-talkie terminal concerned -- or When it has a means to memorize store information offer hysteresis and the information on a store is received from said two or more short-distance walkie-talkies The walkie-talkie terminal characterized by selecting the information on the store where use frequency or offer frequency is high among the information on two or more of the stores with reference to said memorized store use hysteresis or store information offer hysteresis, and providing for said user.

[Claim 2] In the walkie-talkie terminal with which has a clock function, and receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided the store use hysteresis by the user of the walkie-talkie terminal concerned -- or When it has a means to memorize store information offer hysteresis according to the time of day in the case of the use and the information about a store is received from said two or more short-distance walkie-talkies The walkie-talkie terminal characterized by selecting the information on the store where use frequency or offer frequency is high in the time zone at the time of receiving the information on two or more of the stores among the information on

two or more of the stores with reference to said memorized store use hysteresis or store information offer hysteresis, and providing for said user.

[Claim 3] In the walkie-talkie terminal with which receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided When it has a means to memorize the individual humanity news of the user of the walkie-talkie terminal concerned and the information about a store is received from said two or more short-distance walkie-talkies The walkie-talkie terminal characterized by selecting the information on a store according to the individual humanity news of said memorized user among the information on two or more of the stores, and providing for said user.

[Claim 4] The walkie-talkie terminal according to claim 3 characterized by selecting the information on a store according to the age of said memorized user among the information on two or more of the stores, and providing for said user at it when the information about a store is received from said two or more short-distance walkie-talkies in said user's individual humanity news including the user's age.

[Claim 5] The walkie-talkie terminal according to claim 3 characterized by

selecting the information on a store according to the sex of said memorized user among the information on two or more of the stores, and providing for said user at it when the information about a store is received from said two or more short-distance walkie-talkies in said user's individual humanity news including the user's sex.

[Claim 6] In the walkie-talkie terminal with which receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in the store, and a user is provided The walkie-talkie terminal characterized by selecting the information on a store according to the individual humanity news of said memorized user, and providing for said user when it has a means to memorize the individual humanity news of the user of the walkie-talkie terminal concerned and the information about a store is received from said short-distance walkie-talkie.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the walkie-talkie terminal with which receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided.

[0002]

[Description of the Prior Art] Conventionally, the system which provides a cellular phone with information from a server through the Internet is known. In such a system, the user of a cellular phone can access a server via the Internet, and can acquire the information on desired from a nearby base transceiver station.

[0003] By the way, the telecommunications standard of the short-distance wireless called "Bluetooth" appeared in recent years. By carrying the transmitter-receiver of this Bluetooth specification, it is realizable of multipurpose connection in all devices. For example, it is possible to perform data communication between a cellular phone, and a personal computer (PC) and a household-electric-appliances device. Moreover, for example, when accessing the Internet from PC, it connects with a cellular phone automatically from PC,

and the processing of a cellular phone which telephones to an access point and is connected to the Internet is attained further.

[0004]

[Problem(s) to be Solved by the Invention] Furthermore, as an effective example of use, via the Internet, the information on the store is transmitted to the transmitter-receiver of Bluetooth specification installed in a certain store (goods and store which offers service), and the information on the store is broadcast with this transmitter-receiver from a server. And when the user of the cellular phone which passed by the store front goes into the field of the transmitter-receiver which can be communicated, the user can receive offer of the information on the store because a cellular phone receives automatically. If the transmitter-receiver of such Bluetooth specification is installed in each store, such as a shopping center, the user only passed by those store front, and can receive the information on the advertisement of various stores etc.

[0005] However, when the transmitter-receiver of such Bluetooth specification is installed in each store of the shopping quarter where the store crowded, including the information which is not wanted clearly, the user of a cellular phone will receive the information on too much many stores with a cellular phone, and

has a possibility that derangement may arise. Moreover, it thinks, also when the field of the transmitter-receiver installed in each store which can be communicated laps, and almost simultaneous variously [two or more stores], the user of a cellular phone will receive with a cellular phone, and has a possibility of producing derangement increasingly.

[0006] This invention is made in view of the above point, and it aims at offering the walkie-talkie terminal which can be provided more efficiently, without producing derangement for the information broadcast by short-distance radio to a user.

[0007]

[Means for Solving the Problem] In the walkie-talkie terminal with which invention according to claim 1 receives the information on the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided the store use hysteresis by the user of the walkie-talkie terminal concerned -- or When it has a means to memorize store information offer hysteresis and the information on a store is received from said two or more short-distance walkie-talkies It constitutes so that the information on the store where use frequency or offer frequency is high may be selected among the

information on two or more of the stores with reference to said memorized store use hysteresis or store information offer hysteresis and it may provide for said user.

[0008] Information can be offered more efficiently, without making a user produce derangement, since according to invention according to claim 1 the information on the store where use frequency or offer frequency is high can be automatically selected among the information on two or more stores with reference to store use hysteresis or store information offer hysteresis and it can provide for a user, when the information on a store is received from two or more short-distance walkie-talkies.

[0009] Here, a walkie-talkie terminal has the function of the wireless device generally [a portable telephone PHS (Personal Handy-Phone System) and PDA (mobile mold terminal), a land mobile radiotelephone machine, a satellite communication portable telephone, etc.] known.

[0010] In the walkie-talkie terminal with which invention according to claim 2 has a clock function, receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided the store use hysteresis by the user of the walkie-talkie terminal

concerned -- or When it has a means to memorize store information offer hysteresis according to the time of day in the case of the use and the information about a store is received from said two or more short-distance walkie-talkies Among the information on two or more of the stores, with reference to said memorized store use hysteresis or store information offer hysteresis, it constitutes so that the information on the store where use frequency or offer frequency is high may be selected in the time zone at the time of receiving the information on two or more of the stores and it may provide for said user.

[0011] the case where the information on a store is received from two or more short-distance walkie-talkies according to invention according to claim 2 -- the store use hysteresis among the information on two or more stores -- or the time zone at the time of receiving the information on two or more of the stores with reference to store information offer hysteresis -- setting -- use frequency -- or Information can be offered more efficiently, without making a user produce derangement, since the information on the store where offer frequency is high can be selected automatically and it can provide for a user.

[0012] In the walkie-talkie terminal with which invention according to claim 3 receives the information about the store concerned broadcast from the

short-distance walkie-talkie installed in two or more stores, and a user is provided When it has a means to memorize the individual humanity news of the user of the walkie-talkie terminal concerned and the information about a store is received from said two or more short-distance walkie-talkies The information on a store according to the individual humanity news of said memorized user is selected among the information on two or more of the stores, and it constitutes so that it may provide for said user.

[0013] Information can be offered more efficiently, without making a user produce derangement, since according to invention according to claim 3 the information on a store according to a user's individual humanity news can be automatically selected among the information on two or more stores and it can provide for a user, when the information on a store is received from two or more short-distance walkie-talkies.

[0014] In a walkie-talkie terminal according to claim 3, invention according to claim 4 selects the information on a store according to the age of said memorized user among the information on two or more of the stores to said user's individual humanity news, and when the information about a store is received from said two or more short-distance walkie-talkies including the user's

age, it constitutes it in it so that it may provide for said user.

[0015] Information can be offered more efficiently, without making a user produce derangement, since according to invention according to claim 4 the information on a store according to a user's age can be automatically selected among the information on two or more stores and it can provide for a user, when the information on a store is received from two or more short-distance walkie-talkies.

[0016] In a walkie-talkie terminal according to claim 3, invention according to claim 5 selects the information on a store according to the sex of said memorized user among the information on two or more of the stores to said user's individual humanity news, and when the information about a store is received from said two or more short-distance walkie-talkies including the user's sex, it constitutes it in it so that it may provide for said user.

[0017] Information can be offered more efficiently, without making a user produce derangement, since according to invention according to claim 5 the information on a store according to a user's sex can be automatically selected among the information on two or more stores and it can provide for a user, when the information on a store is received from two or more short-distance

walkie-talkies.

[0018] In the walkie-talkie terminal with which invention according to claim 6 receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in the store, and a user is provided When it has a means to memorize the individual humanity news of the user of the walkie-talkie terminal concerned and the information about a store is received from said short-distance walkie-talkie, the information on a store according to the individual humanity news of said memorized user is selected, and it constitutes so that it may provide for said user.

[0019] According to invention according to claim 6, the information on a store according to a user's individual humanity news can be selected automatically, and it can provide for a user.

[0020]

[Embodiment of the Invention] Hereafter, the gestalt of suitable operation of this invention is explained with reference to a drawing. Drawing 1 is drawing showing the whole system example of a configuration with which receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided.

[0021] As shown in drawing 1 , the information repeating installation 2 is installed in each store in a shopping center 10. In addition, although two or more shopping centers which have the store in which the information repeating installation 2 was installed exist in fact, in this operation gestalt, they show one shopping center 10 to the expedient top of explanation, and drawing 1 , and explain to them. Moreover, as shown in drawing 1 , the information repeating installation 2 is connected to the local bridge network 4 built in the shopping center 10, respectively. Moreover, the information repeating installation 2 which is represented exists in a shopping center 10, respectively. The information repeating installation 2 and the information offer server 1 of this representation are mutually connected through the public line 5. Moreover, in this operation gestalt, the Internet as a network is built using the public line 5.

[0022] The information offer server 1 consisted of computers, such as a well-known personal computer, a medium scale computer, and a large-sized computer, as hardware resources, and is equipped with database 1a which memorizes various information. In this database 1a, the information on each store of a shopping center 10 that the information repeating installation 2 was installed is memorized. Such information is matched with the address

information which was given to each of the information repeating installation 2 and which is mentioned later, and is memorized. And the information offer server 1 has a function as a Web server which offers information on the Internet, and distributes the information memorized by database 1a to the information repeating installation 2 of representation [a shopping center 10]. Under the present circumstances, the information on all the stores in the shopping center 10 in which the information repeating installation 2 was installed is distributed to the information repeating installation 2 of representation.

[0023] Each information repeating installation 2 is equipped with the transmitter-receiver with a short-distance radio function while it is equipped with the control section which consisted of CPUs, the storage section which memorizes information. Moreover, mutually different address information is given to each information repeating installation 2. Thereby, the information offer server 1 can specify the information repeating installation 2 of each representation which is the distribution place of the information on each store of a shopping center 10.

[0024] Furthermore, the information repeating installation 2 of representation has the function linked to the Internet, and can exchange information between

the information offer servers 1 through the Internet. And if the information distributed from the information offer server 1 is received, the information repeating installation 2 of representation will distribute the information to other information repeating installation 2 connected to the local bridge network 4, and will be transmitted.

[0025] In this way, the information which spread round each information repeating installation 2 is stored temporarily by the storage section of each information repeating installation 2. And the information on a proper is broadcast by the transmitter-receiver with a short-distance radio function from each information repeating installation 2. For example, a Bluetooth telecommunications standard is used for this short-distance radio. By Bluetooth specification, the 2.4gigahertz band called an ISM (Industrial Scientific and Medical) band is used, and in order to reduce interference with other devices, a method called frequency popping which is a kind of spectrum spread system is adopted. Moreover, although the communication link range by the transmitter-receiver of Bluetooth specification is about circumference 10m and a short distance, the size of this transmitter-receiver is very small, and is contained by the walkie-talkie terminal 3.

[0026] Thereby, the walkie-talkie terminal 3 can receive the information broadcast from the information repeating installation 2. That is, the walkie-talkie terminal 3 can receive the broadcast information automatically, when it enters in [with the information repeating installation 2 by short-distance radio / which can be communicated] a field.

[0027] Here to the information on the store broadcast from each information repeating installation 2 For example, the advertising information on a store that it corresponds, and discount information (a coupon etc. is included) are included, and it is the identification number (when a store is a chain store) of the store further. even if it exists in a different area -- the same identification number -- carrying out -- the store genre classification The information on (for example, classification, such as a bookstore, a teahouse, a restaurant, and a movie theater), a user's sex expected to use the store, the age range, the income range, the weight range, the height range, etc. is added. selecting the information with which a customer is provided based on this added information (henceforth "additional information"), if the broadcast information is automatically received at the walkie-talkie terminal 3 -- ** -- it becomes.

[0028] The walkie-talkie terminal 3 is equipped with the display which consists of

the storage section which consists of the control section which was equipped with all functions, such as a well-known portable telephone, for example, consisted of a clock function and a CPU, RAM which memorizes information, a PROM, etc., a liquid crystal display which displays information, the loudspeaker which outputs voice, the input section which receives the input from a user. A control section displays the received information on the display screen of a display, or reproduces it from a loudspeaker. Thereby, a user can be provided with the information on each store.

[0029] Moreover, in the storage section, a user's individual humanity news (for example, a user's age, sex, bodily features (height, weight), an occupation, an income, a hobby, a schedule, genre classification of a favorite store), store use hysteresis (it memorizes according to the time of day in the case of use), store information offer hysteresis (it memorizes according to the time of day in the case of a display), etc. are memorized. The user of the walkie-talkie terminal 3 can input a user's individual humanity news from the input section. Moreover, the user of the walkie-talkie terminal 3 goes into a store, and store use hysteresis is memorized in accordance with the time of day at that time, when purchasing goods, or in case offer of service is received. For example, the riding capacity of

the store makes the identification number of a store transmit to the walkie-talkie terminal 3 by the information repeating installation 2 of the store to short-distance radio, the walkie-talkie terminal 3 receives it, and it memorizes in the storage section according to the time of day at that time. Moreover, when purchasing goods, or in case offer of service is received, the user itself operates the input section and may be made to input the identification number of the store into the walkie-talkie terminal 3.

[0030] Moreover, store information offer hysteresis is memorized in accordance with the time of day at that time of that, when the information on a store is received, it is displayed on the display screen of a display or the walkie-talkie terminal 3 reproduces it from a loudspeaker.

[0031] Moreover, when the walkie-talkie terminal 3 concerned enters in [of the transmitter-receiver of two or more information repeating installation 2 / which can be communicated] a field and receives the information on two or more stores, based on the information memorized by the storage section, the control section of the walkie-talkie terminal 3 selects the information on a certain store, and provides a user with it.

[0032] Next, an example in case the user of the walkie-talkie terminal 3 receives

offer of the information on a store is explained with reference to drawing 3 .

Drawing 3 shows an information flow in case a user receives offer of the information on a store.

[0033] First, as shown in ** of drawing 3 , the information offer server 1 reads information from database 1a, and distributes the information on each store of a shopping center 10 (for example, advertising information) to the information repeating installation 2 of representation installed in the store of a shopping center 10 through the Internet based on address information. When information repeating installation 2 installed in the store A of the shopping center 10 shown in drawing 1 is made into representation and it receives the information transmitted from the information offer server 1, for example, the information repeating installation 2 concerned as shown in ** of drawing 3 , while memorizing the information concerning the storage section -- Store B and Store C -- the information repeating installation 2 installed in .. is alike, respectively, corresponding information is distributed based on the address information of its that, and it transmits. And as shown in ** of drawing 3 , each information repeating installation 2 broadcasts it from a transmitter-receiver with a short-distance radio function while memorizing the information on each proper in

the storage section.

[0034] In a shopping center 10, when the user who carries the walkie-talkie terminal 3 goes into the field of the information repeating installation 2 installed in Store B which can be communicated, the walkie-talkie terminal 3 displays this information on the display screen of a display while it receives the information broadcast from the information repeating installation 2 and memorizes it in the storage section. In this way, the example of information displayed on the display screen of the display of the walkie-talkie terminal 3 is shown in drawing 2 . As shown in drawing 2 , on the display screen of the display of the walkie-talkie terminal 3, the advertising information on the goods offered at Store B, i.e., the service price of goods, and the discount ticket of goods are displayed. Thereby, a user can go into Store B, can show a salesclerk the discount ticket displayed on the display screen of a display, and can purchase goods at a discount price. Under the present circumstances, the salesclerk of that store transmits the identification information of a store to the walkie-talkie terminal 3 by short-distance radio from the information repeating installation 2 of that store. And the walkie-talkie terminal 3 is memorized in the storage section in response to the information according to the time of day at that time.

[0035] Next, when the user who carries the walkie-talkie terminal 3 goes into the field of the information repeating installation 2 installed in Store C which can be communicated, the walkie-talkie terminal 3 receives the information on Store C, and displays it on the display screen of a display. Thus, serially, since each store can offer advertising information, it can induce a customer the user who carries the walkie-talkie terminal 3 which passed by near [the] the store. Moreover, whenever a user uses a store, store use hysteresis is accumulated in the storage section. Moreover, store information offer hysteresis is also accumulated in coincidence at the storage section.

[0036] Next, if the user who carries the walkie-talkie terminal 3 goes into the field with which the field of two or more information repeating installation 2 installed in the shopping center which can be communicated lapped, information will be received from two or more information repeating installation 2. In this case, as shown in ** of drawing 3 , with reference to store use hysteresis (store information offer hysteresis is sufficient), the control section of the walkie-talkie terminal 3 selects information on the store where use frequency is the highest in the time zone at that time of receiving (it selects based on the identification number contained in additional information), and provides a user with it. For

example, when the user is walking along the shopping center 10 at lunchtime and the walkie-talkie terminal 3 receives the information on two or more stores, such as Restaurant A, Restaurant B, Bookstore C, and Bookstore D, supposing the user uses Restaurant A most in the time zone (there are many counts of use), the control section of the walkie-talkie terminal 3 will select the information on Restaurant A, and will display it on a display.

[0037] Here, this time zone is divided like [at 11:00 a.m. / to 30] 11:31 a.m. to 1:00 p.m. from 9:00 a.m., and is beforehand memorized by the storage section. Thereby, a control section can select the information on the store where use frequency is the highest in the time zone when the time of day which received the information on two or more stores is contained. On the other hand, when the user is walking along the shopping center 10 around 3:00 p.m. and the walkie-talkie terminal 3 receives the information on two or more stores, such as Restaurant A, Restaurant B, Bookstore C, and Bookstore D, supposing the user uses Bookstore C for the time zone most, the control section of the walkie-talkie terminal 3 will select the information of Bookstore C, and will express it to a display as store use hysteresis.

[0038] Moreover, as another example, if the walkie-talkie terminal 3 receives the

information on two or more stores, with reference to the genre classification of the store included in additional information, a control section can select the information on the store corresponding to the genre classification of the favorite store memorized by the walkie-talkie terminal 3, and it can also provide a user with it.

[0039] Furthermore, as another example, if the walkie-talkie terminal 3 receives the information on two or more stores, a control section can also select and offer the information on a store according to a user's individual humanity news memorized by the storage section. When a user is a woman and the walkie-talkie terminal 3 receives information from a cosmetics store and the clothes store for males, for example, the control section of the walkie-talkie terminal 3 Based on the information on the sex contained in each of the information on those stores (the information the information which shows a woman indicates a male to be to the information on the clothes store for males is included in the information on a cosmetics store, respectively), the information on a cosmetics store is selected and it displays on a display.

[0040] When a user's age is 30 years old and the walkie-talkie terminal 3 receives information from a toy store and a bookstore, moreover, the control

section of the walkie-talkie terminal 3 Based on the information on the age range included in each of the information on those stores (the information on the age range from 0 years old to 15 years old is included in the information on a toy store, and the information on the age range after 12 years old is included in the information of a bookstore, respectively), the information of a bookstore is selected and it displays on a display. In addition, you may make it, select and offer the information on a store according to a user's hobby, an occupation, an income, height, weight, etc. for example. Furthermore, the walkie-talkie terminal 3 computes a false corpulence degree from the rate of height and weight, and you may make it offer the information on a store according to it (information on diet food etc.).

[0041] Furthermore, you may make it select the information to offer by the schedule memorized by the walkie-talkie terminal 3. For example, when the schedule of a meal is contained within 3 hours after current at OO restaurant, except for a meal-related store, it selects from the received information.

[0042] Furthermore, it may set up so that **** information may be given priority to and offered at the walkie-talkie terminal 3, for example, you may constitute so that the information on a coupon etc. may be given priority to and selected.

[0043] Furthermore, a navigation (GPS) function may be carried in the walkie-talkie terminal 3, the positional information (LONG, LAT data) detected by that cause may be transmitted to the information offer server 3 through the information repeating installation 2, and the information on a store that positional information (LONG, LAT data) was balanced may be constituted so that the walkie-talkie terminal 3 may be answered.

[0044] The use hysteresis of the store where the walkie-talkie terminal 3 was memorized according to this operation gestalt as explained above, Since the information on the store which should be offered automatically can be selected out of the information on two or more stores broadcast from the information repeating installation 2 and it can provide for a user based on store information offer hysteresis, individual humanity news, etc. Information can be offered more efficiently, without making a user produce derangement.

[0045] In addition, although it constituted so that the information on the store which should be offered automatically might be selected and it might provide for a user in the above-mentioned operation gestalt based on the use hysteresis of a store, store information offer hysteresis, individual humanity news, etc. out of the information on two or more stores broadcast from the information repeating

installation 2 In addition, you may constitute so that you may make it select the information on a store in the combination of two or more individual humanity news and the information on a store may be selected in the combination of the use hysteresis of a store, and individual humanity news. It constitutes so that it can set up whether even which information is referred to and information is offered further, for example, only the sex of individual humanity news and age are referred to, and you may make it not refer to other information and hysteresis in this case.

[0046] In addition, it is not plurality, and also when receiving information from one information repeating installation 2, ***** is possible also for selecting the information on the store which should be offered automatically and providing for a user based on the use hysteresis of a store, store information offer hysteresis, individual humanity news, etc., out of the information on two or more stores broadcast from the information repeating installation 2.

[0047] Moreover, although it constituted so that the information on a store might be distributed through the Internet from the information offer server 1, the information on the store to offer is accumulated into the information repeating installation 2 of each store, and you may make it broadcast it in the

above-mentioned operation gestalt.

[0048]

[Effect of the Invention] Information can be offered more efficiently, without making a user produce derangement, since according to this invention the information on a store can be selected automatically and it can provide for a user, when the information on a store is received from two or more short-distance walkie-talkies as explained above.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is drawing showing the whole system example of a configuration with which receives the information about the store concerned broadcast from the short-distance walkie-talkie installed in two or more stores, and a user is provided.

[Drawing 2] It is drawing showing the example of the display screen of the information on the store in the display of a walkie-talkie terminal.

[Drawing 3] It is drawing showing an information flow in case a user receives

offer of the information on a store.

[Description of Notations]

1 Information Offer Server

1a Database

2 Information Repeating Installation

3 Walkie-talkie Terminal

4 Local Bridge Network

5 Public Line

10 Shopping Center